DOCUMENT RESUME

ED 296 459 EA 020 119

AUTHOR Pugh, Wesley C.
TITLE A Study of School Grade Organization: Policy Implications for Middle Schools. Executive Summary. Report No. 8828.
INSTITUTION Birmingham Public Library, Ala.
PUB DATE Feb 88
NOTE 20p.; Paper presented at the Annual Meeting of the Eastern Educational Research Association (11th, Miami Beach, FL, February 24-27, 1988).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Instructional Program Divisions; Junior High Schools; *Middle Schools; *Policy Formation; *School Organization; *Urban Schools
IDENTIFIERS *Pennsylvania (Philadelphia)

ABSTRACT

In November 1987, the superintendent of a major urban public school system (Philadelphia) publicized the district's decision to convert junior high schools (grades 7-8-9) into middle schools (grades 5/6-7-8). The superintendent's decision was based on several factors related to grade organizational structure, including (1) the district's already diverse and incongruent grade groupings; (2) the number of student suspensions and grade retentions in 1986-87; and (3) a preliminary analysis of pupils' academic performance in 1986. The present study, which supports the district's conversion of junior high schools to middle schools, is framed within the context of a historical perspective on the development of both school types. The study employs a chart essay format, and a case study of the district's first two junior high schools converted to middle schools (1985-87) provides an analysis of the policy implementation. A literature review suggested no definitive and generalizable research findings on the merits of middle schools over junior high schools. A public school's decision to convert to middle schools would not be valid based solely on the literature. Consistent with effective school research's emphasis on each school as a unique setting, a school district considering a middle school conversion policy needs to examine its particular set of circumstances to determine the basis for such a decision. Included are four tables and seven references. (MLH)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED296459

EXECUTIVE SUMMARY

# A STUDY OF SCHOOL GRADE ORGANIZATION: POLICY IMPLICATIONS FOR MIDDLE SCHOOLS

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it
☐ Minor changes have been made to improve reproduction quality
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
W.C. Pugh
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Report No. 8828
February, 1988

Wesley C. Pugh, Ph.D.
Office of Research & Evaluation
Policy Research
School District of Philadelphia

(Paper presented at the Eastern Educational Research Association, Eleventh Annual Conference, Miami Beach, Florida. February 24-27, 1988. The research and views expressed in this paper are the author's own, and do not reflect the policy or position of the School District of Philadelphia.)

EA020119

BOARD OF EDUCATION

Herman Mattleman, Esq., President
Mrs. Ernestine J. Rouse, Vice President
Mr. Stanley E. Abelson
Ms. Rosemarie B. Greco
Dr. Ruth W. Hayre
Mr. Rodney D. Johnson
Dr. Thomas A. Mills
Mrs. Helen Oakes
Dr. Christine Torres-Matrullo

Dr. Constance E. Clayton
Superintendent of Schools

February 1, 1988

Prepared by:
Wesley C. Pugh, Ph.D.
Policy Research

Dr. Linda Brawner
Research Associate
Policy Research

Dr. Irvin J. Farber
Director
Priority Operations
Evaluation Services

Dr. James H. Lytle
Executive Director
Office of Research &
Evaluation

A Study of School Grade Organization:
Policy Implications For Middle Schools

In November, 1987 the superintendent of a major urban public school system (Philadelphia) formally publicized the School District's decision to convert junior high schools (grades 7-8-9) into middle schools (grades 5/6-7-8) (Philadelphia Inquirer, 1987). The superintendent's decision seemed to be based on the following factors: (a.) The school district's present grade organizational structure which is diverse and incongruent; (b.) the number of student suspensions (1985-1987), based on grade organizational structure, supported a policy of junior high schools' conversion to middle schools; (c.) retention data (1985-1987), i.e., student failures illustrated a pattern similar to the suspension data trends; and, (d.) preliminary data analysis of pupils' academic performance (1986) suggested that school grade organization impacted on students' achievement levels.

The study is framed within the context of an historical perspective on the development of junior high and middle schools. A literature review is presented that provides the background for understanding the research on middle schools and junior high schools. A chart essay format (Haensly, Lupkowski & McNamara, 1987) is incorporated in this study as a means of presenting the data base which contributed to the superintendent's policy decision. A case study of the district's first two junior high schools that were converted to middle schools (1985-1987) provided a micro-analysis of the implementation of the policy. The case study also contributed to policy implications and recommendations that are included in the paper's conclusion.

The literature review suggests that there exists no definitive and generalizable research findings on the merits of middle schools over junior high schools. The quote by James Bryant Conant, from his national memorandum to school boards (1960), is perhaps the most significant viewpoint that can be ascribed to the issue of school grade organization: "Because of wide diversity in school organization, professional disagreement, and my own observations, I conclude that the place of grades 7, 8, and 9 in the organization of a school system is of less importance than the program provided for adolescent youth."

The decision of a public school system to convert junior high schools to middle schools would not be valid based solely on the literature. Perhaps, one of the most important tenets of the effective schools' research movement has been the emphasis on each school as a unique setting (Goodlad, 1984). Consistent with such a perspective, a school district considering a policy of establishing middle schools needs to look at its particular set of circumstances, to determine the basis for such a decision.

In the chart essay discussion to follow, school district data trends over a two year period (1985-1986, 1986-1987) are presented. A study of student suspensions, student retention rates, and a preliminary analysis of achievement data from 1986 are illustrated. The data lend support to the District's policy decision to convert junior high schools into middle schools.

## Chart Essay - Data Profiles/Trends

Research Question 1: Do student suspension rates differ as reflected by the District's grade organization, i.e., junior high schools (grades 7, 8, and 9,); middle schools (grades 5/6, 7, and 8); and elementary schools (grades kindergarten - 8)?

Findings/Trends:

(Based on Table 1 and Diagram A, attached)

- Students are consistently suspended at a higher rate in the District's junior high schools (grades 7 & 8), than in similar grades in middle and elementary schools.

- Junior high school students (in grades 7 & 8) were suspended at twice the rate of elementary school students (in grades 7 & 8).

- In the school year 1985-86, 35% of the junior high school student population (in grades 7 & 8) was suspended, compared with 26% of the middle school pupil population in similar grades.

- While the student suspension rate was slightly reduced between 1985-86 and 1986-87 for middle and elementary schools, it remained relatively unchanged at both the junior high school level, and systemwide.

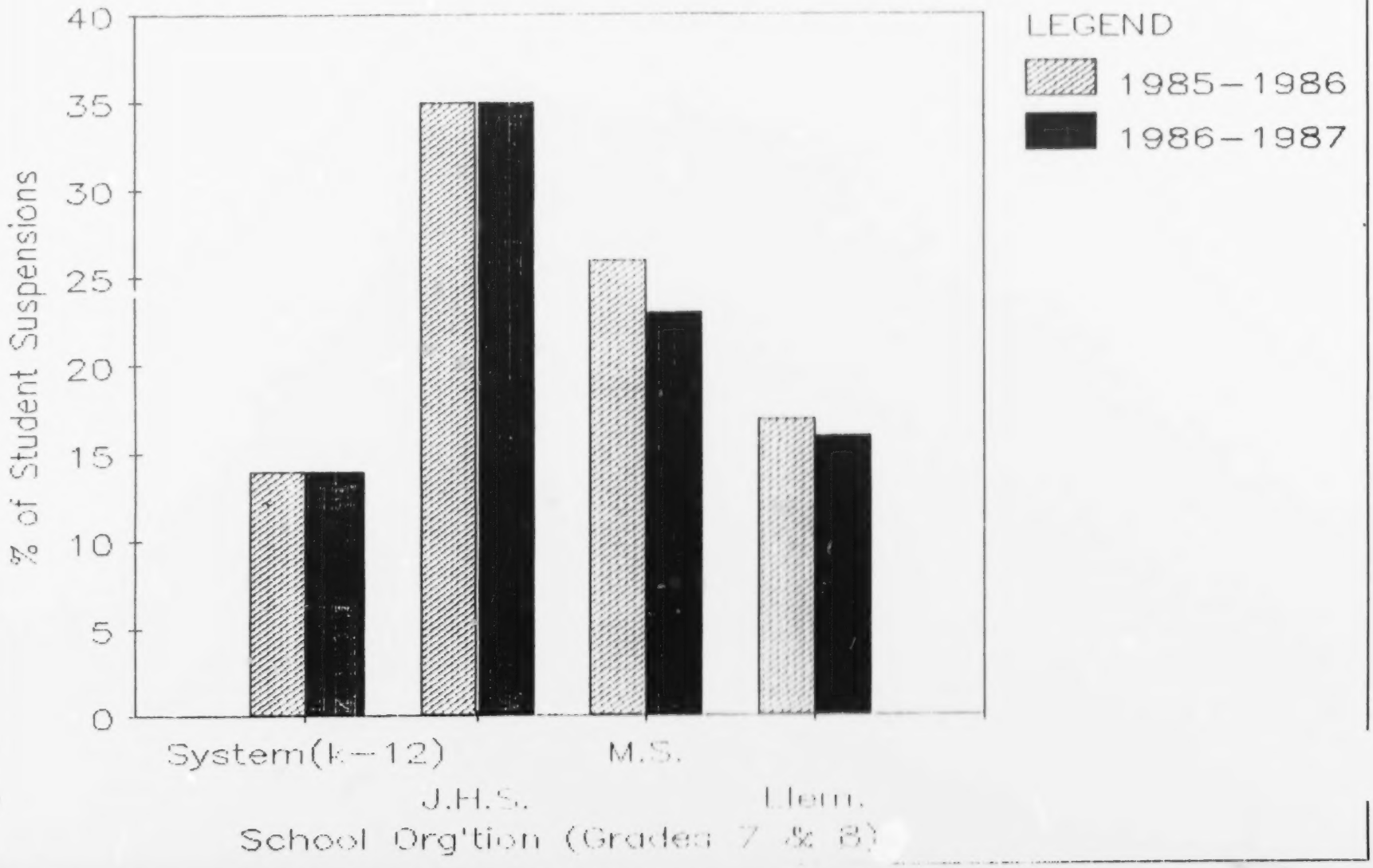
Table 1.

Student Suspension Data Profiles (1985-1987)

| School Organization | NUMBER OF STUDENT SUSPENSIONS: 1985-1986 # | 1985-1986 % | 1986-1987 # | 1986-1987 % |
|---|---|---|---|---|
| Junior High Schools (grades 7 & 8) | 3,783 (N=10,709 enrollment; 19 schools) | 35% | 3,668 (N=10,375 enrollment; 17 schools) | 35% |
| Middle Schools (grades 7 & 8) | 1,746 (N=6,701 enrollment; 14 schools) | 26% | 1,629 (N=7,161 enrollment; 16 schools) | 23% |
| Elementary Schools (grades 7 & 8) | 771 (N=4,636 enrollment; 37 schools) | 17% | 712 (N=4,578 enrollment; 38 schools) | 16% |
| Systemwide Total (all grades) | 28,473 (N=206,552 enrollment) | 14% | 28,086 (N=200,375 enrollment) | 14% |

# Diagram A.

Student Suspension Profiles
1985–1987



Research Question 2: Do student retention rates differ as reflected by the District's grade organization, i.e., junior high schools (grades 7, 8, and 9); middle schools (grades 5/6, 7, and 8); and elementary schools (grades kindergarten - 8)?

Findings/Trends:

(Based on Table 2 and Diagram B, attached)

- Students in junior high schools (grades 7 & 8) are retained in grade at twice the rate of middle school and elementary school students (in grades 7 & 8).

- In the school year 1985-86, 16% of the junior high school student population (in grades 7 & 8) was retained, compared with 6% of the middle school pupils, and 8% of the elementary school pupils in similar grades ( 7 & 8).

- In the school year 1986-87, 15% of the junior high school student population (grades 7 & 8) was retained in grade, compared with 8% of the middle school and 7% of the elementary school pupils in grades 7 & 8.

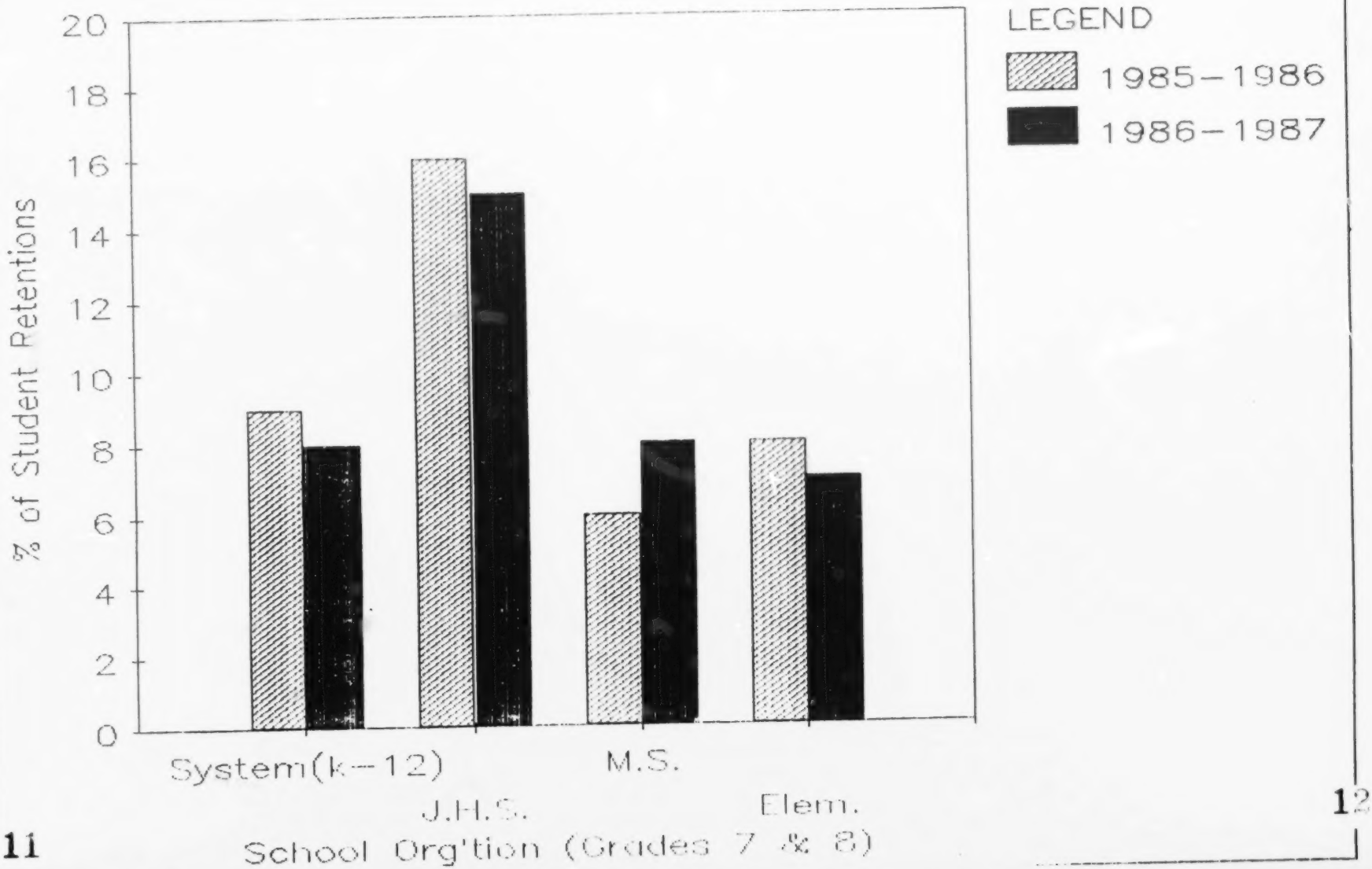
- The junior high school pupil retention rates (grades 7 & 8) for 1985-86 and 1986-87 exceeded the systemwide retention rates, while the middle school and elementary school rates (grades 7 & 8) for the same two year period closely coincided with the District's overall rates.

Table 2.

Student Retention Data Profiles (1985-1987)

| School Organization | NUMBER OF PUPILS RETAINED: 1985-86 # | 1985-86 % | 1986-87 # | 1986-87 % |
|---|---|---|---|---|
| Junior High Schools (grades 7 & 8) | 1,673 (N=10,433 enrollment; 17 schools) | 16% | 1,597 (N=10,375 enrollment; 17 schools) | 15% |
| Middle Schools (grades 7 & 8) | 408 (N=6,446 enrollment; 13 schools) | 6% | 535 (N=7,161 enrollment; 16 schools) | 8% |
| Elementary Schools (grades 7 & 8) | 369 (N=4,725 enrollment; 38 schools) | 8% | 333 (N=4,578 enrollment; 38 schools) | 7% |
| Systemwide Total (all grades) | 18,083 (N=201,445 enrollment) | 9% | 15,567 (N=200,375 enrollment) | 8% |

Diagram B.
Student Retention Profiles
1985–1987



Research Question 3: Does student academic performance differ as reflected by the District's grade organization, i.e., junior high schools (grades 7, 8, and 9); middle schools (grades 5/6, 7, and 8); and elementary schools (grades kindergarten - 8)?

Findings/Trends:

(Based on Table 3, Diagrams C and D, attached)

- Elementary and middle school students in grade 8 scored higher on the District's Reading/English and Total Mathematics standardized tests than 8th grade junior high school students.

- Eighth grade elementary school pupils scored 17.8 points higher in Reading/English than 8th grade junior high school students.

- Eighth grade middle school students scored 12.9 points higher in Reading/English than 8th grade junior high school students.

- Eighth grade elementary school students scored 8.6 points higher in Mathematics than eighth grade junior high school students.

- Eighth grade middle school students scored 3.9 points higher on the District's Mathematics test than 8th grade junior high school students.

Table 3.

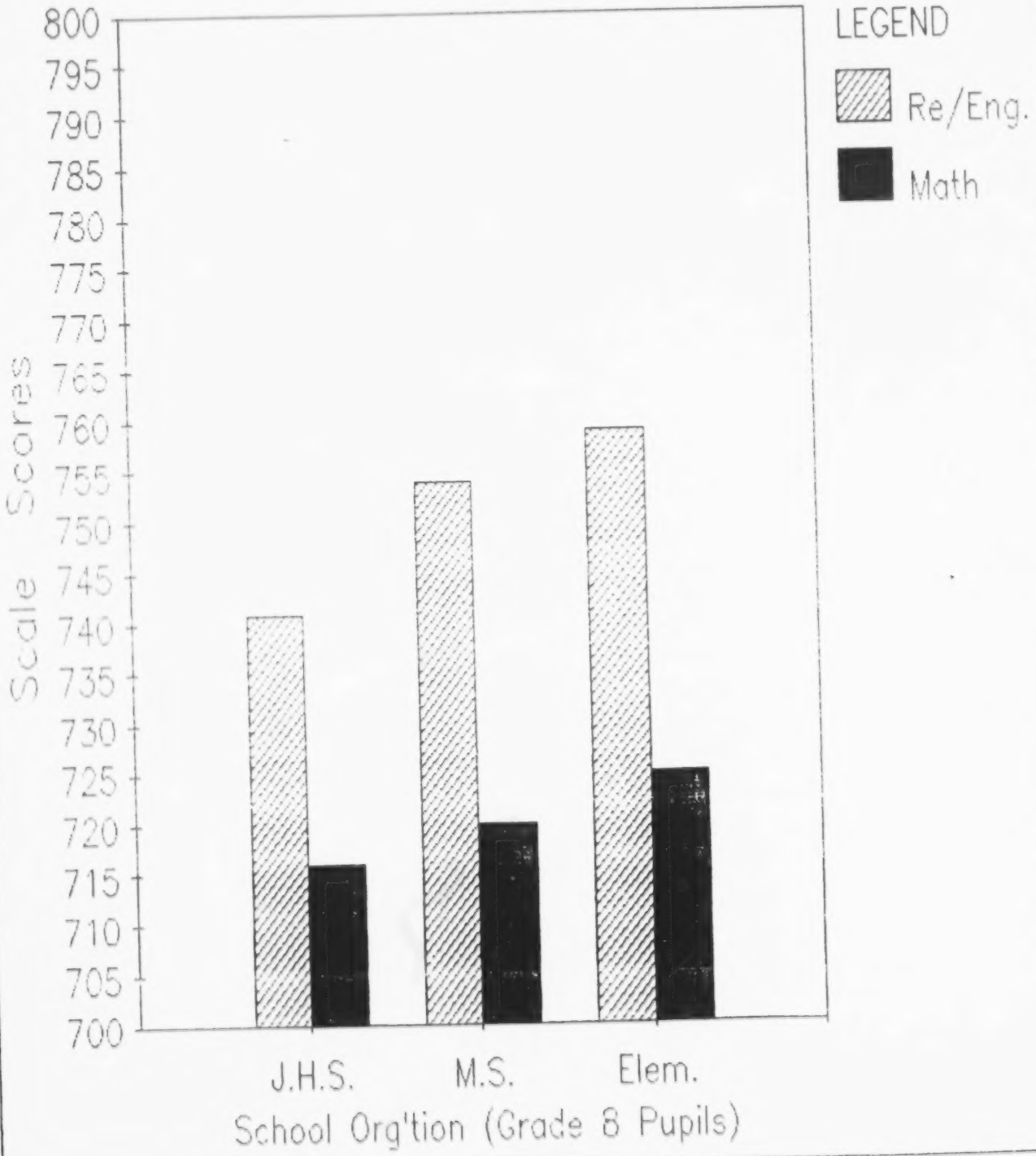
Pupil Test Performance In Grade 8
1986

| School Organization | Number of Pupils | Reading/English* | Total Mathematics* |
|---|---|---|---|
| Junior High Schools (grade 8) | 4,737 | 741.3 | 716.2 |
| Middle Schools (grade 8) | 3,783 | 754.2 | 720.1 |
| Elementary Schools (grade 8) | 2,208 | 759.1 | 724.8 |

* Average scale scores adjusted for AFDC (Citywide Standardized Test)

# Diagram C.

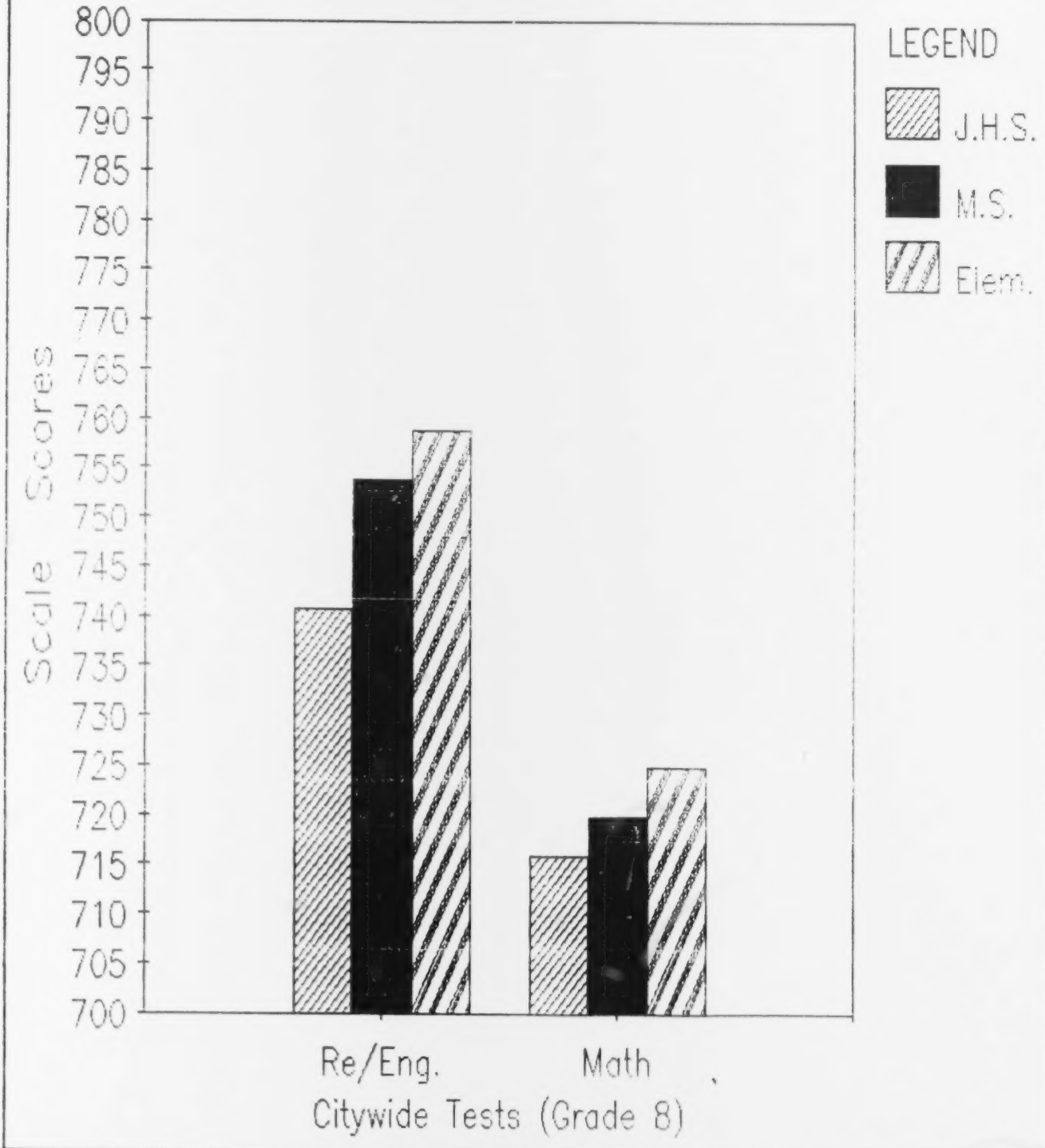
## Pupil Performance on Citywide Tests
## 1986



# Diagram D.

School Org'tion

Citywide Test Profile (1986)



## Conclusion: Policy Implications and Recommendations

This study discussed the grade organization policy of a large urban public school system. The District policy was to convert all its existing junior high schools into middle schools. The literature review on the establishment and development of junior high and middle schools provided an historical perspective. Since the early 1900's up to the 1980's, there was a research controversy that suggested one grade organizational structure over another. A synthesis of the research findings indicates that the evidence is inconclusive concerning grade organization's impact on student achievement and school climate.

An individual school district's policy to convert to a middle school grade organization can be seen as politically sound, and educationally valid based on multiple indicators, e.g., the district's suspension and retention data, pupil achievement data, and the political necessity. The establishment of junior high schools in urban areas has involved a political process (see, e.g., Hogan, 1986). The formation of middle schools has, in many ways, emulated the junior high school developmental process (see, e.g., Whittier, 1966).

The issue of school grade organization and its effect on adolescents is often related to educational practices within the context of "student-orientation" (elementary and middle schools), versus "subject matter" orientation (junior high schools) (see, e.g., Coldiron, et. al., 1987). Additionally, educational leaders and policymakers cannot ignore public perceptions of the educational system which are influenced by the media.

The hallmark of the superintendent's tenure in this system has been to proclaim public education as an advocate for youth. The establishment of: a systemwide promotion policy; a standardized curriculum; and, a new citywide testing program, were initiatives developed by the superintendent. Such initiatives were designed both to restore public confidence in the school

system, and to increase the quality of education. In a city where neighborhood influences on the political structure traditionally impact on the public school system, diverse grade organizational structures developed over time, and in some ways perpetuated inequities within the educational system. The diversity of the District's grade organizational structure suggested an incongruency with the superintendent's initiatives for improving education. The District's suspension and retention rates, and pupil achievement data along with the limits on effective implementation of the superintendent's initiatives can be seen as contributors to the development of a school grade organization policy.

The case study of the first two junior high schools to be converted into middle schools as a result of the policy has implications leading to the following policy recommendations:

(1.) The conversion of junior high schools into middle schools requires extensive planning; administrative and faculty staff development; and a systemwide understanding and awareness of the policy.

If the District is to avoid converting junior high schools into middle schools in name only, it is imperative that newly established middle schools' staffs understand the "child-centered" emphasis. Staff development, administrative leadership, faculty involvement, and central office/district level logistical and instructional support are imperative. Community considerations, i.e., parents' awareness and involvement are important in the planning process.

(2.) Students in the middle schools must be prepared for the change from junior high schools.

Eighth graders, and other students, will require personalized/individualized attention that should encourage responsibility and leadership. Adolescents need extensive counseling and advisement. Student self-esteem must be

addressed in view of the environmental changes occurring at the school and the preparation for high school. Along with the physical and emotional development associated with puberty, middle school students require meticulous guidance if school climate and academic performance are to improve.

(3.) The District needs to continuously monitor the policy, i.e., the conversion of junior high schools into middle schools. Focus groups made-up of principals, teachers, and counselors to discuss the transition process may increase the effectiveness of the policy.

Future research and evaluation need to be systematically performed in order to assess the impact of the policy. Formative evaluations, e.g., monitoring of the policy, are necessary in order to determine constructive strategies for improving the educational achievement and climate of the newly established middle schools. The success of the District's policy on middle schools is inescapably tied to the aforementioned recommendations.

## References


Coldiron, J., et. al. (1987). A description of school structures and classroom practices in elementary, middle, and secondary schools. Paper presented at the American Educational Research Association, Washington, D.C.

Conant, J. (1960). Education in the Junior High School Years. New Jersey: Educational Testing Service.

Goodlad, J. (1984). A Place Called School. New York: McGraw-Hill.

Haensly, P., et. al. (Spring, 1987). The Chart Essay: A strategy for communicating findings to policy makers and practitioners. Educational Evaluation and Policy Analysis. Vol. 9, No. 1, pp. 66-77.

Hogan, D. (1985). Class and Reform: School and Society in Chicago, 1880-1930. Philadelphia: University of Pennsylvania Press.

Mason-Dorman, C. (1986;1987). Superintendent's Management Information Center. Philadelphia, Pa.: School District of Philadelphia, Office of Research.

Philadelphia Inquirer (November 10, 1987). (Mezzacappo, D.) Moving to middle schools. (Newspaper publication).